23. (new)   The method of claim 14, wherein said VBR coded bitstream segments are encoded according to a quality constrained encoding algorithm.

24. (new)   The method of claim 20, wherein said CLBR coded bitstream segments are encoded according to a bitrate constrained encoding algorithm.--

REMARKS

Claim 1 has been canceled and new claims 2-24 have been added in the above-captioned application. Examination and consideration of claims 2-24 are respectfully requested.

The applicants believe that all of the claims are presently in condition for allowance. If, however, the Examiner believes that there are any issues requiring adverse action in any of the claims now pending in the application, it is requested that the Examiner telephone Eamon J. Wall, at (732) 530-9404, so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,

10/16/01

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MARKED-UP CLAIMS

2. (new)   A data structure, comprising:

a variable bit rate (VBR) program stream, comprising a first plurality of VBR coded bitstream segments; and

substantially constant low bit rate (CLBR) program stream, comprising a second plurality of CLBR bitstream segments;

said VBR and CLBR program streams comprising information associated with a common program to be served via a communications link; wherein

for each of a plurality of bitstream segments forming said common program, at least one of a VBR and a corresponding CLBR bitstream segment is provided to a communications link in accordance with bandwidth availability indicia.

3. (new)   The data structure of claim 2, wherein at least some segments of said CLBR program stream are generated by transcoding corresponding VBR segments in response to said bandwidth availability indicia.

4. (new)   The data structure of claim 2, wherein said bandwidth availability indicia comprises at least one of an indicator of disk bandwidth and an indicator of communications link bandwidth.

5. (new)   The data structure of claim 2, wherein each of said VBR and CLBR program streams comprise transport streams.

6. (new)   The data structure of claim 2, wherein each of said VBR and CLBR program streams comprise transport streams in substantial compliance with the MPEG-2 transport stream format.

7. (new)   The data structure of claim 4, wherein both of said VBR and said corresponding CLBR bitstream segments are provided to said communications link in response to available disk bandwidth above a first threshold level.

8. (new)   The data structure of claim 7, wherein only said VBR bitstream segments are provided to said communications link in response to available disk bandwidth below said first threshold level.

9. (new)   The data structure of claim 7, wherein only said CLBR bitstream segments are provided to said communications link in response to available disk bandwidth below a second threshold level.

10. (new)   The data structure of claim 2, wherein said VBR coded bitstream segments are encoded according to a quality constrained encoding algorithm.

11. (new)   The data structure of claim 2, wherein said CLBR coded bitstream segments are encoded according to a bitrate constrained encoding algorithm.

12. (new)   The data structure of claim 3, wherein said CLBR coded bitstream segments are transcoded according to a bitrate constrained encoding algorithm.

13. (new)   The data structure of claim 2, wherein said transcoding process is adapted according to said bandwidth availability indicia.

14. (new)   A method for providing a program stream, comprising:
        retrieving, from a mass storage device in response to a program request from a user, respective segments of at least one of a variable bit rate (VBR) program stream and a constant low bit rate (CLBR) program stream; and
        providing at least one of a said VBR and said CLBR program stream segments to a communications link adapted to serve said requesting user in accordance with bandwidth availability indicia;
        said VBR program stream comprising a first plurality of VBR coded bitstream segments, said CLBR program stream comprising a second plurality of CLBR

bitstream segments, said VBR and CLBR program streams comprising information associated with said requested program.

15. (new)   The method of claim 14, wherein only said VBR program stream segments are retrieved from said mass storage device, said method further comprising:

transcoding said retrieved VBR program stream segments to produce corresponding CLBR program stream segments.

16. (new)   The method of claim 15, wherein said transcoding produces bitrate constrained CLBR program stream segments in response to a communications link bandwidth availability indicator.

17. (new)   The method of claim 14, wherein said bandwidth availability indicia comprises at least one of an indicator of disk bandwidth and an indicator of communications link bandwidth.

18. (new)   The method of claim 14, wherein each of said VBR and CLBR program streams comprise transport streams.

19. (new)   The method of claim 14, wherein each of said VBR and CLBR program streams comprise transport streams in substantial compliance with the MPEG-2 transport stream format.

20. (new)   The method of claim 17, wherein both of said VBR and said corresponding CLBR bitstream segments are provided to said communications link in response to available disk bandwidth above a first threshold level.

21. (new)   The method of claim 20, wherein only said VBR bitstream segments are provided to said communications link in response to available disk bandwidth below said first threshold level.

22. (new)   The method of claim 20, wherein only said CLBR bitstream segments are provided to said communications link in response to available disk bandwidth below a second threshold level.

23. (new)   The method of claim 14, wherein said VBR coded bitstream segments are encoded according to a quality constrained encoding algorithm.

24. (new)   The method of claim 20, wherein said CLBR coded bitstream segments are encoded according to a bitrate constrained encoding algorithm.